Forecasting Energy Prices, the Use of New Technologies, and the Impact of New Energy Policies

Presented to the Committee on Science

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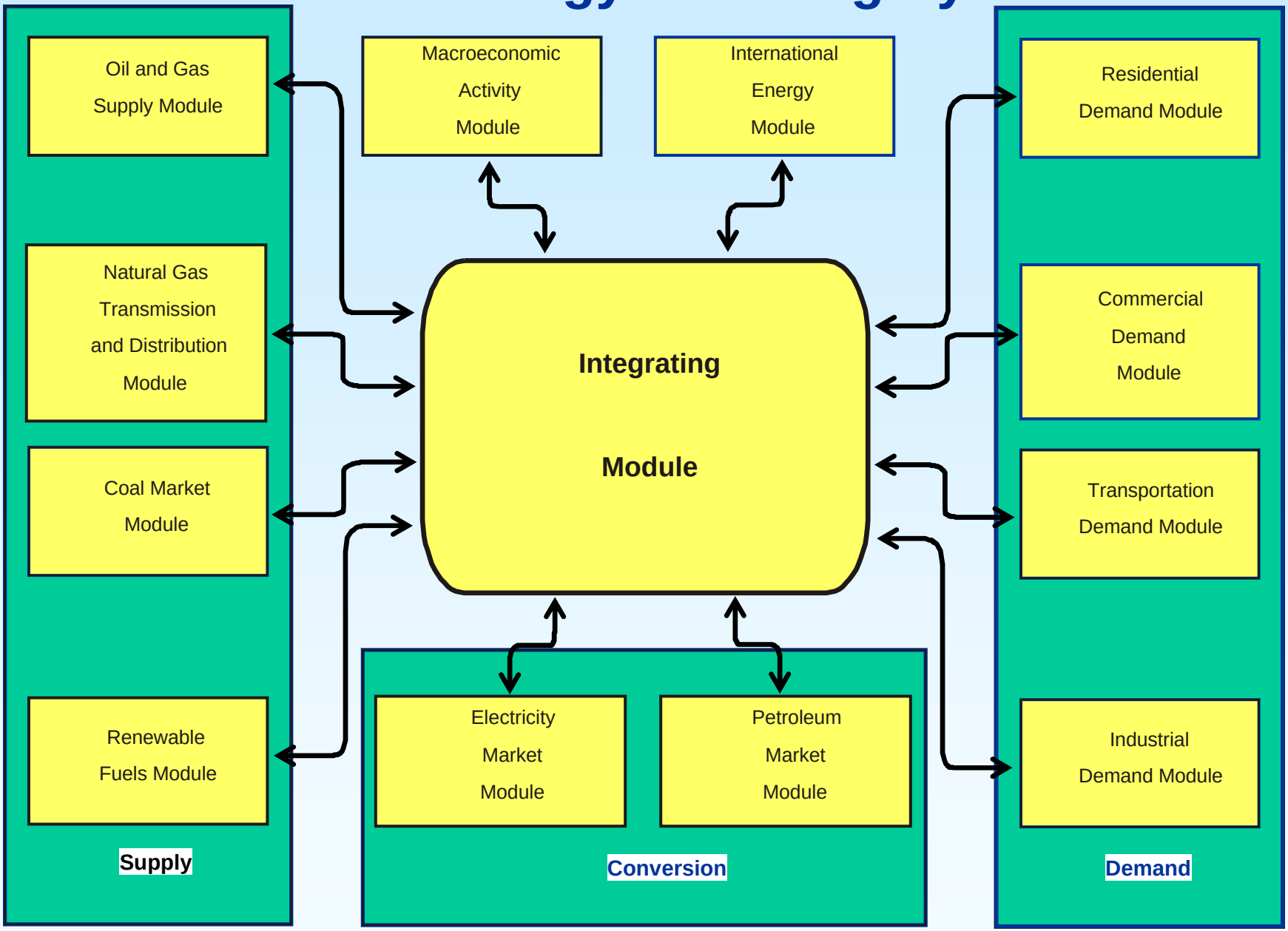
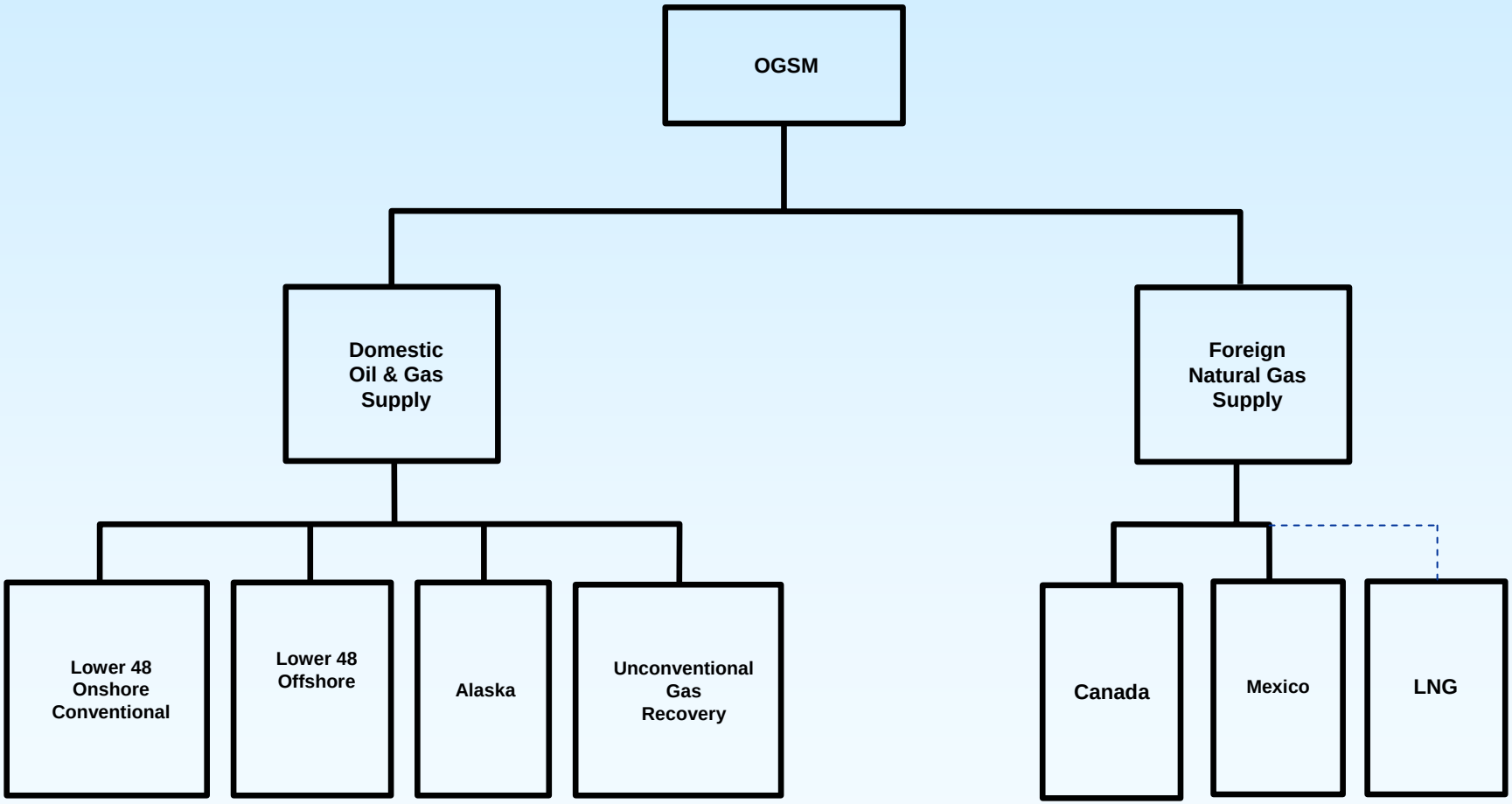
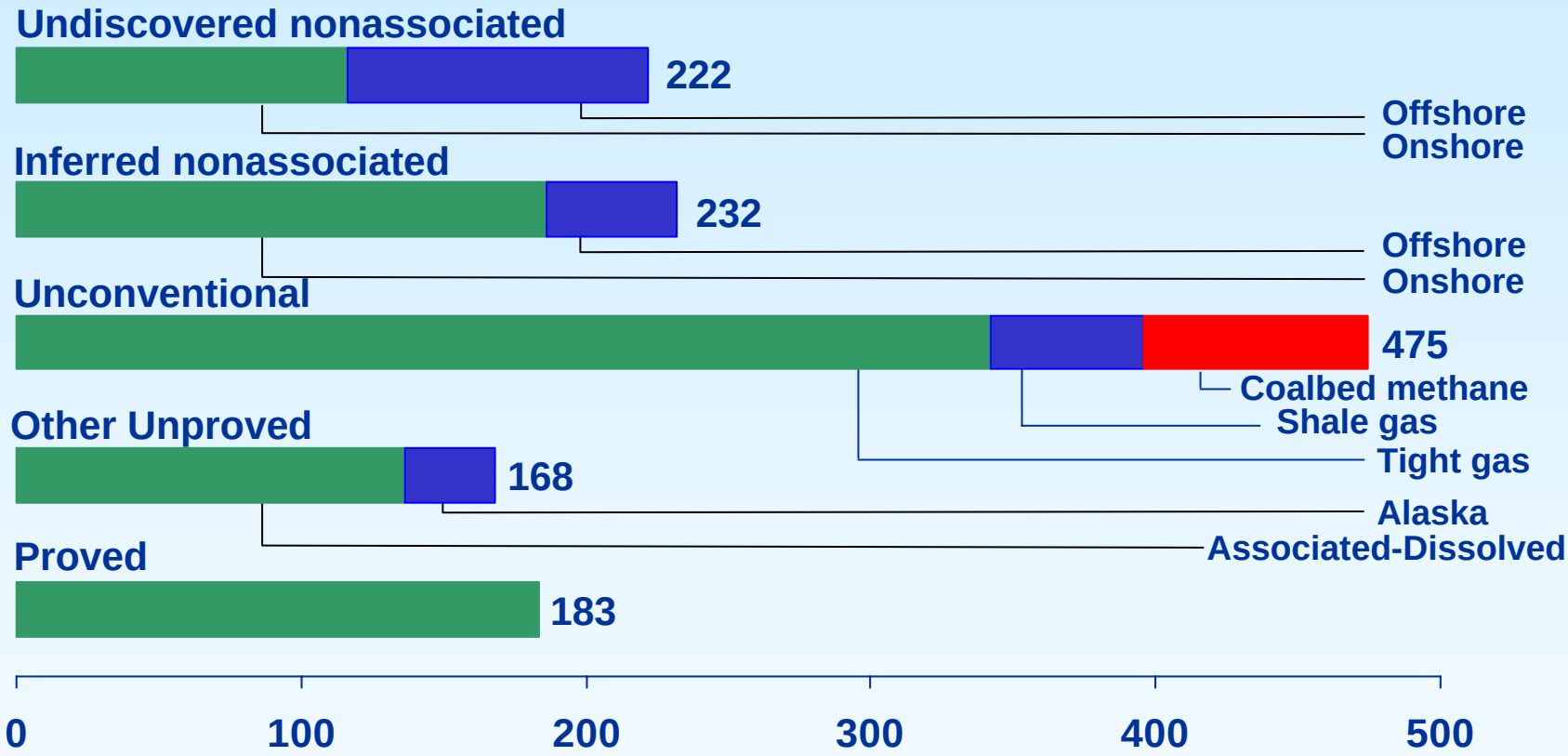
National Energy Modeling System



Submodules within the Oil and Gas Supply Module



Technically Recoverable Natural Gas Resources as of January 1, 2002 (trillion cubic feet)



Total: 1,279 trillion cubic feet

Technology Representation in NEMS

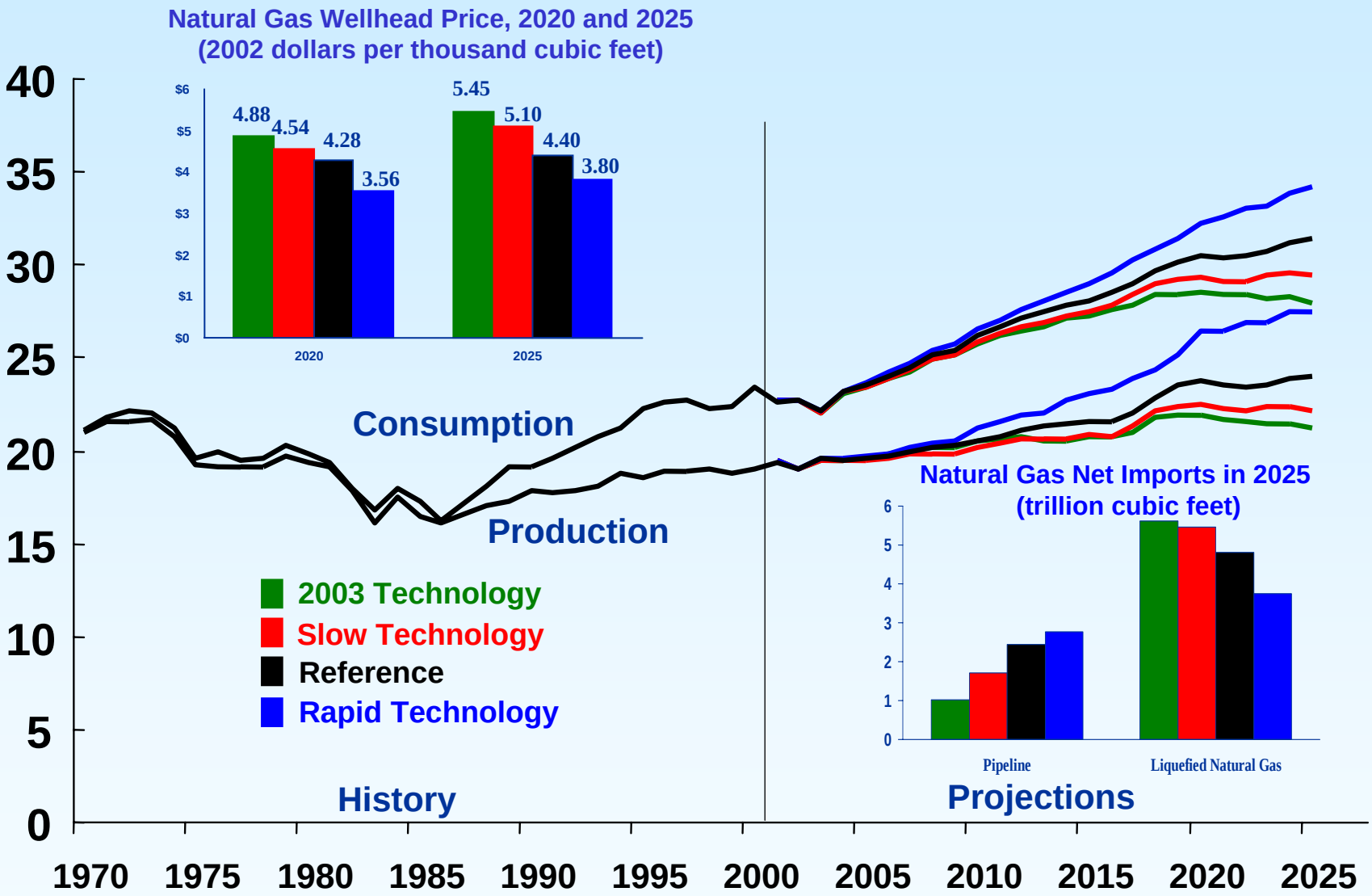
Explicit Technology Representations (Efficiencies, Capital, and O&M Costs, Capacity Factors, Date Commercial)

- Residential and Commercial
- Transportation
- Electricity Generation
- Natural Gas Transmission and Distribution
- Refineries

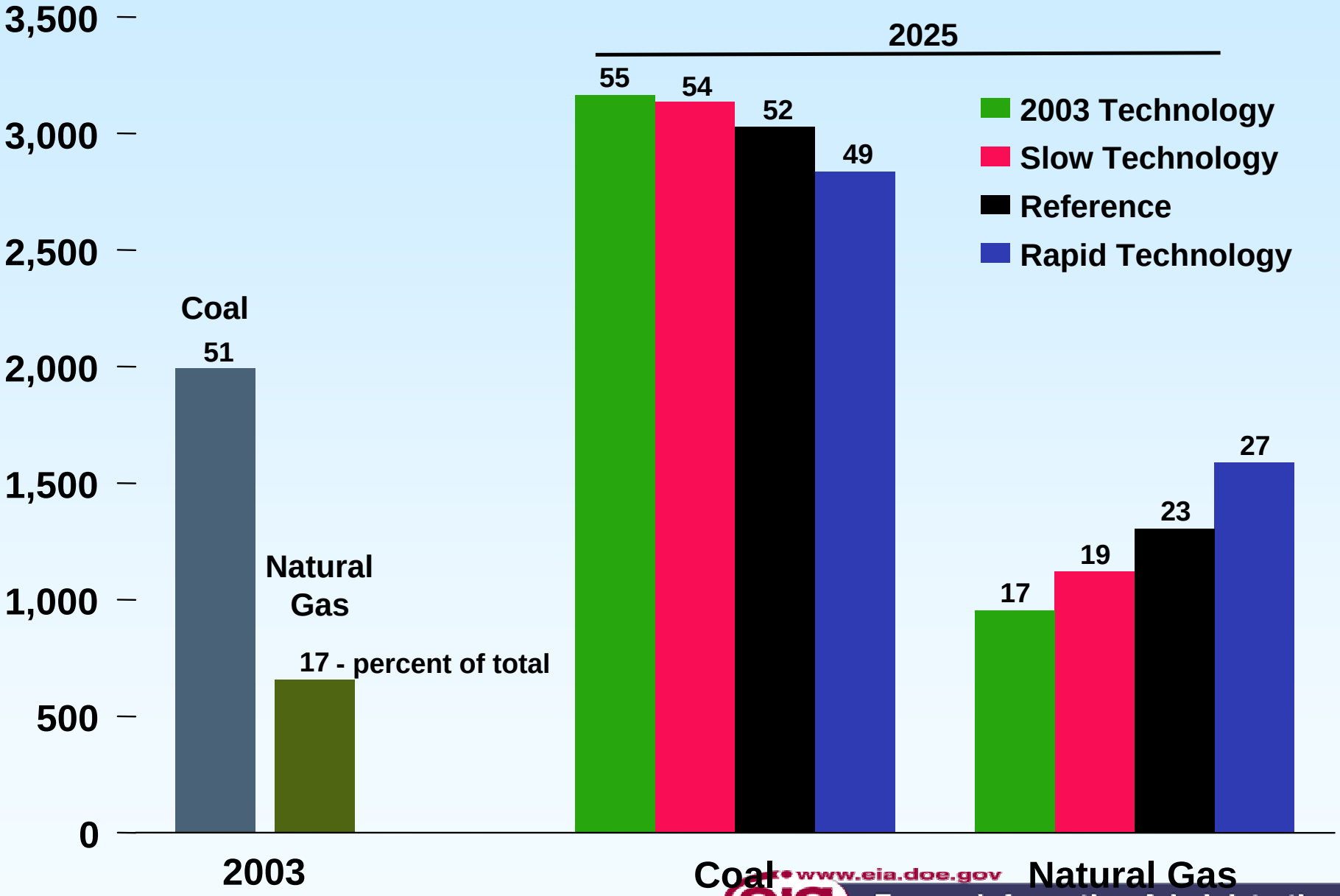
Indirect Technology Representation (Time Trend Changes)

- Oil, Gas and Coal Supply
- Industrial Sector Demand -except for CHP and motors

Natural Gas Production, Consumption, and Imports, 1970 - 2025 (trillion cubic feet)



Electricity Generation from Coal and Natural Gas in Four Cases, 2003 and 2025 (billion kilowatthours)



Projected Unintended Beneficiaries of Climate Change Technology Initiative (CCTI) Tax Initiatives (percent of revenue reductions)

CCTI Initiative	Unintended Beneficiaries
Buildings	
- Fuel Cell	2
- Energy-Efficient New Homes	13
- Rooftop Solar Equipment	Almost 100
- Distributed Power	77

Source: Analysis of The Climate Change Technology Initiative: Fiscal Year 2001, Energy Information Administration, Washington, D.C., April 2000.

Examples of Recent EIA Service Reports

- Analysis of S. 1844, the Clear Skies Act of 2003; S. 843, the Clean Air Planning Act of 2003; and S. 366, the Clean Power Act of 2003, May 2004

- Summary Impacts of Modeled Provisions of the 2003 Conference Energy Bill, February 2004

- Analysis of Restricted Natural Gas Supply Cases, February 2004